UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

LYDALL THERMAL/ACOUSTICAL, INC., et al,

Plaintiffs,

v. Case No. 07-12473

FEDERAL MOGUL CORPORATION, et al, HONORABLE AVERN COHN

Defendant.

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CLAIM CONSTRUCTION DECISION

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I. Introduction

This is a patent case. Plaintiff Lydall/Accoustical, Inc. (Lydall) is suing defendant Federal-Mogul Corporation (Federal-Mogul) claiming infringement. The patents in suit are U.S. Patent Number 6,092,622 and U.S. Patent Number Re: 39, 260 (collectively, "the '260 patent") covering a thermal and acoustical insulating shield.[1] Claim 45 has been designated as the paradigm claim. Before the Court are the parties' claim construction briefs relating to interpretation of the ambiguous words/phrases in claim 45 of the '260 patent, i.e, Markman.[2] Broadly stated, Lydall says that the ambiguous terms are either not in need of interpretation or should be interpreted in accordance with their ordinary meaning, particularly referring to standard dictionary definitions. Federal-Mogul says that the specification defines the meaning of the terms in question, resulting in a more restrictive interpretation than the standard dictionary definition.

The parties filed briefs and the Court held a Markman hearing at which it requested supplemental papers. The supplemental papers have been filed. The matter is ready for decision.

The respective positions of the parties are displayed in the claim chart attached as Exhibit A. Exhibit A also depicts the interpretation by the Court which governs further proceedings in this case. Exhibit B is the Court's identification of the key reference

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[1]Although there are two patents, the reissue patent is an identical and more expansive version of the original patent. The reissue patent contains the paradigm claim and all cited references are to the reissue patent.

[2]See Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). See also The Sedona Conference Report on the Markman Process, June 2006 Public Comment Version, available at www.thesedonaconfernce.org.

numerals used in the patent. As the Court has repeatedly observed, claim construction in a Markman proceeding is always tentative and its conclusions are open to change as the case unfolds in the validity and infringement phases. Such is the case here.[3]

II. Background

A. The '260 Patent

The ABSTRACT describes the invention:

> A flexible, adhesively attachable, self-sealing, thermal and acoustical insulating shield has a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers. Binding fibers of each binding layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers protruding from the opposite binding layer so a to form a tufted upper surface and a tufted lower surface of the batt. A flexible adhesive is disposed and adhered substantially

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[3]The parties, Lydall primarily, have described the accused device in some detail in asserting that knowledge of the accused device is relevant, if not essential, to claim construction. The parties cite Lava Trading Inc. v. Sonic Trading Mgmt., LLC, 445 F.3d 1348, 1350 (Fed. Cir. 2006). In Lava Trading, the Federal Circuit made the following statement:

> . . . this record on appeal does not supply any meaningful comparison of the accused products and asserted claims. Without knowledge of the accused products, this court cannot assess the accuracy of the infringement judgment under review and lacks a proper context for an accurate claim construction. "While a trial court should certainly not prejudice the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process, knowledge of that product or process provides meaningful context for the first step of the infringement analysis, claim construction." . . . . Without the vital contextual knowledge of the accused products or processes, this appeal takes on the attributes of something akin to an advisory opinion on the scope of the '982 patent. The problems with such an appeal, even if within the court's jurisdiction, have been noted in many of the court's prior cases.

(Internal citations omitted). Importantly, the Federal Circuit in Lava Trading was reviewing the district court's claim construction decision and a stipulated judgment of infringement. Properly viewed, the Federal Circuit's comments regarding knowledge of the accused device pertain to an analysis of an infringement decision. Both parties, in the Court's view, read too much into the statement from Lava Trading as to the importance of the accused device in claim construction. At best, knowledge of the accused device provides some context for the Markman process.

over the upper surface and, preferably, over lower surface of the batt such that the tufts on the upper and lower surfaces are secured to the surfaces by the adhesive. A flexible, protective foil is adjacent to, and preferably permanently adhered by the adhesive to, the lower surface of the batt. The protective foil has edge portions which extend beyond edges of the fibrous batt and the edge portions have a flexible adhesive disposed and adhered substantially over upper edge surfaces of the edge portions. The shield may be flexed and pressed to configure and permanently attach the tufted upper surface to an object to be shielded and the edge portions may be pressed to permanently attach the edge upper surfaces of the edge portions to the object so as to self-seal the edge portions to the object.

The SUMMARY OF THE INVENTION reads in pertinent part:

Thus, the present invention provides a flexible, Thus, the present invention provides a flexible, adhesively attachable, self-sealing, thermal and acoustical insulating shield. The invention is based on several primary and subsidiary discoveries.

. . .

Accordingly, briefly stated, the present invention provides a flexible, adhesively attachable, self-sealing, thermal and acoustical insulating shield. Just as in the above-noted U.S. patent application, the shield has a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers. Binding fibers of each binding layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers protruding from that opposite binding layer. This forms a tufted upper surface and a tufted lower surface of the batt. A flexible adhesive is disposed and adhered substantially over the tufted upper surface of the batt such that the tufts on the tufted upper surface are secured to that surface by the adhesive. A flexible, protective foil is disposed adjacent to the tufted lower surface of the batt.

The invention is depicted in Figure 5, shown below:

The invention is depicted in Figure 5, shown below:

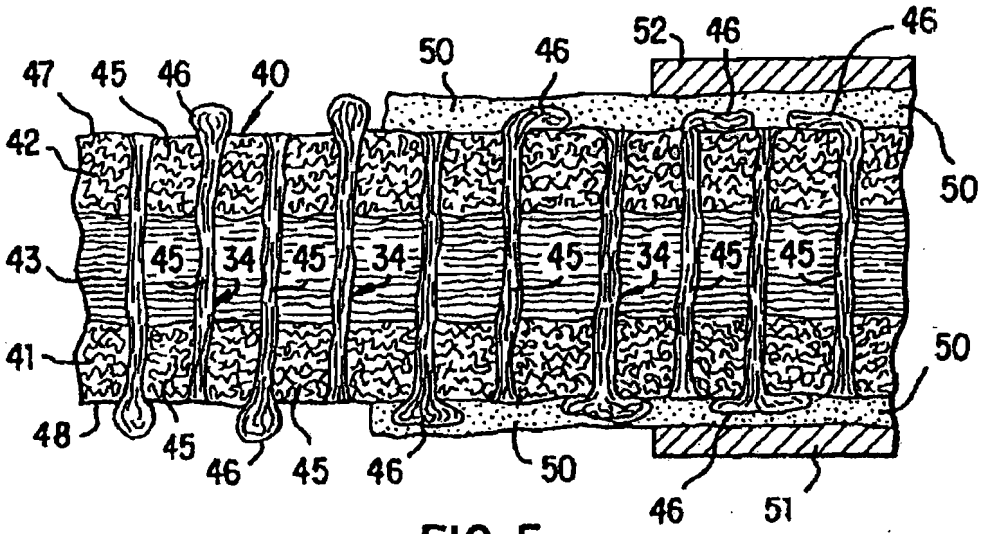

FIG. 5

B. Claim 45

Claim 45 (broken down into appropriate clauses) reads:

A flexible, adhesively attachable, thermal and acoustical insulating shield, comprising:

(1) a needled, flexible, fibrous batt (40) of fibers (44, 45), some of the fibers (45) located at a bottom portion of the batt (40) and a top portion of the batt (40) being needledly disposed through the batt (40) to provide tufts (46) of fibers (45) protruding from the fibrous batt (40) so as to form a tufted upper surface (47) and a tufted lower surface (48) of the batt (40);

(2) a flexible adhesive (50), disposed and adhered substantially over the tufted upper surface (47) such that the tufts (46) on the upper surface (47, 48) are secured to that surface by the adhesive (50); and

(3) a flexible, protective foil (51) permanently adhered to the lower surface (48) of the batt;
and wherein the shield may be flexed and pressed to configure and permanently attach the tufted upper surface (47) to an object (1) to be shielded

The underlined terms require interpretation by the Court. Unfortunately, proper

thirteen (13) component parts as follows:

(1) flexible

(2) thermal and acoustical

(3) needled

(4) fibrous batt of fibers

(5) fibers located at a bottom portion of the batt and a top portion of the batt

(6) needledly disposed through the batt

(7) tufts of fibers

(8) protruding from the fibrous batt

(9) form a tufted upper surface and a tufted lower surface of the batt

(10) tufted upper surface

(11) tufts on the upper surface are secured to that surface by the adhesive

(12) permanently adhered

(13) tufted upper surface

As seen from above, the phrase "tufted upper surface" appears multiple times, thus there are less than 13 items in need of construction.

III. Legal Standards

Claim construction[4] is a matter of law for the Court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). The focus is on "what one of ordinary skill in the art at the time of the invention

[4]The Court refers to the process of determining the meaning of a claim as claim "construction." The Court uses the term "interpret" to describe the process of construing the meaning of a limitation or a phrase or a word or an element where the meaning is not clear or is ambiguous. Lack of clarity and ambiguous are synonymous.

would have understood the term to mean." Id. at 986.[5] The first step in construing a patent claim is to examine the intrinsic evidence:

> First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention. Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.
>
> Thus, second, it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. . . . The specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it. Thus, the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.
>
> Third, the court may also consider the prosecution history of the patent, if in evidence. This history contains the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims. As such, the record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims. Included within an analysis of the file history may be an examination of the prior art cited therein.

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citations omitted).

These sources are analyzed in a hierarchical fashion, beginning with the " 'heavy presumption' " that claim terms mean what they say and carry their ordinary meaning as viewed by one of ordinary skill in the art. W.E. Hall Co. v. Atlanta Corrugating, LLC, 370

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[5]The parties in their papers did not clearly define who is one of ordinary skill in the art.

F.3d 1343, 1350 (Fed. Cir. 2004) (citing Johnson Worldwide Assocs., v. Zebco Corp., 175 F.3d 985, 989 (Fed. Cir. 1999)); Intellectual Property Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc., 336 F.3d 1308, 1315 (Fed. Cir. 2003). Dictionaries, encyclopedias, and treatises may be used to discover a term's ordinary meaning. Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003); Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202-03 (Fed. Cir. 2002).

As noted above, Federal-Mogul says that the specification plays a key, if not dispositive role, in interpreting the ambiguous words/phases of Claim 45. This Court has previously articulated the law on the role of the specification (and prosecution history) in determining a claim term's meaning, stating:

> Ordinary meaning, however, is not the end of the analysis; the specification and prosecution history must also be studied to determine if it is appropriate to afford a claim term its ordinary meaning. Kumar v. Ovonic Battery Co., 351 F.3d 1364, 1367-68 (Fed. Cir. 2003). The Federal Circuit recently explained the "twin axioms" regarding the role of the specification in claim construction:
>
> > On the one hand, claims must be read in view of the specification, of which they are a part. On the other hand, it is improper to read a limitation from the specification into the claims. Although parties frequently cite one or the other of these axioms to us as if the axiom were sufficient, standing alone, to resolve the claim construction issues we are called upon to decide, the axioms themselves seldom provide an answer, but instead merely frame the question to be resolved. We have recognized that there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification. As we have explained, an inherent tension exists as to whether a statement is a clear lexicographic definition or a description of a preferred embodiment. The problem is to interpret claims in view of the specification without unnecessarily importing limitations from the specification into the claims. That problem can present particular difficulties in a case such as this one, in which the written description of the invention is narrow, but the claim language is sufficiently broad that it can be read to encompass

> features not described in the written description, either by general characterization or by example in any of the illustrative embodiments.
>
> Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed. Cir. 2004) (citations and quotation marks omitted); see also Slimfold Mfg. Co. v. Kinkead Indus., Inc., 810 F.2d 1113, 1116 (Fed. Cir. 1987) ("Claims are not interpreted in a vacuum, but are part of and are read in light of the specification.").
>
> Thus, in certain situations, the specification or prosecution history may show an intent to depart from the ordinary meaning of a claim term. CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366-67 (Fed.Cir. 2002). For example, the patentee may act as his own lexicographer and explicitly define a term in the specification or prosecution history. Id. The patentee may also characterize "the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Teleflex, Inc. v. Ficosa North America Corp., 299 F.3d 1313, 1327 (Fed. Cir. 2002); see Alloc, Inc. v. ITC, 342 F.3d 1361, 1377 (Fed. Cir. 2003) ("a claim term will not carry its ordinary meaning if the intrinsic evidence shows that the patentee limited the scope of the claims"). If the "specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent" even if the language itself might be broad enough to cover the feature in question. SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001). Similarly, "when the preferred embodiment is described in the specification as the invention itself, the claims are not necessarily entitled to a scope broader than that embodiment." Modine Mfg. Co. v. ITC, 75 F.3d 1545, 1551 (Fed. Cir. 1996), abrogated on other grounds by Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000), rev'd by 535 U.S. 722, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002). However, simply because the specification describes only one embodiment of the invention does not mean that the claims should automatically be limited to that embodiment. Liebel-Flarsheim, 358 F.3d at 906. Above all, the intrinsic evidence must show a clear and unmistakable intent to limit claim scope in order to overcome ordinary meaning and narrow a claim. Id.

Honeywell Intern., Inc. v. ITT Indus., Inc., 330 F. Supp. 2d 865, 867-77 (E.D. Mich.

2004).[6]

The Court went on to say:

> It is a well established canon of claim construction that when a particular embodiment is described in the specification as the invention itself, and not just one way of utilizing it, the claims are not entitled to a scope broader than that embodiment. See Network, LLC v. Centraal Corp., 242 F.3d 1347, 1352 (Fed. Cir. 2001); Wang Labs., Inc. v. America Online, Inc., 197 F.3d 1377, 1383 (Fed. Cir. 1999); Modine, 75 F.3d at 1551; Autogiro Co. of Am. v. United States, 181 Ct.Cl. 55, 384 F.2d 391, 398 (1967). For instance, if the specification calls an embodiment "the invention" or "the present invention," it is appropriate to limit the claims to that embodiment. See, e.g., Microsoft Corp. v. Multi-Tech. Sys. Inc., 357 F.3d 1340, 1348 (Fed. Cir. 2004) ("in light of those clear statements in the specification that the invention ('the present system') is directed to communications 'over a standard telephone line,' we cannot read the claims ... to encompass data transmission over a packet-switched network such as the internet."); SciMed, 242 F.3d at 1343-44 (holding that "the characterization of the coaxial configuration as part of the 'present invention' is strong evidence that the claims should not be read to encompass the opposite structure"); Watts v. XL Sys., Inc., 232 F.3d 877, 882-84 (Fed. Cir. 2000) (finding that "the specification actually limits the invention to structures that utilize misaligned taper angles, stating that 'the present invention utilizes [the varying taper angle] feature' "). The context in which the embodiment is described must always be considered to determine if the embodiment is the "invention" or just the "preferred embodiment." Wang Labs., 197 F.3d at 1383; Cultor Corp. v. A.E. Staley Mfg. Co., 224 F.3d 1328, 1331 (Fed. Cir. 2000) ("Whether a claim must, in any particular case, be limited to the specific embodiment presented in the specification, depends in each case on the specificity of the description of the invention and on the prosecution history. These sources are evaluated as they would be understood by persons in the field of the invention."). This is consistent with the axiom that statements in the specification must be clear in order to narrow the scope of a claim. See Teleflex, 299 F.3d at 1327.

Id. at 878-79.

Thus, a claim term must be given its ordinary meaning **unless** the patentee

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[6]The Court subsequently found the patent in Honeywell was not infringed, guided in large part by the Markman decision. See Honeywell Intern., Inc. v. ITT Indus., Inc., 2005 WL 5416765 (E.D. Mich. May 17, 2005) (NO. CIV.A. 02-73948) (unpublished). The Federal Circuit affirmed the Court's decision. See Honeywell Intern., Inc. v. ITT Indus., Inc., 452 F.3d 1312 (2006).

redefined the term in the specification or characterized "the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Teleflex, Inc. v. Ficosa North America, 299 F.3d 1313, 1327 (Fed. Cir. 2002). With these principles in mind, the Court considers the identified claim terms.

IV. Analysis

A. Claim terms

1. "flexible"

The parties agree that "flexible" means capable of being bent or flexed. The Court adopts this interpretation.

2. "thermal and acoustical insulating"

The parties agree that "thermal and acoustical insulating" means "heat and sound protecting." The Court adopts this interpretation.

3. "needled"

Lydall says the term means "pricked, pierced or stitched with one or more needles," referencing a dictionary definition. Federal-Mogul says the term means "made by a needle-punching process." The Court adopts Federal-Mogul's interpretation. The only technique for "needling" disclosed in the '260 patent is needle-punching. No other process is described anywhere in the patent. As evidenced from the tutorial,[7] needle-punching is a particular process used in the nonwoven industry. The use of the term "needling" in the '260 patent pertains exclusively to that term as

[7]The tutorial was held on February 21, 2008.

used in the industry to describe that process. One skilled in the art would know that.

4. "fibrous batt[8] of fibers"

Here is where the parties' views divide. Lydall says that the "fibrous batt of fibers" means nothing more than a "sheet of material consisting of fibers." Federal-Mogul, on the other hand, says that the phrase has a far narrower meaning based on the specification. Federal-Mogul argues that the proper construction is "a composite batt having a layer of insulating fibers sandwiched between layers of binding fibers."

The dispute over this phrase centers on whether the "batt" must be interpreted to consist of a composite of layers, specifically a binding layer and an insulating layer. Federal-Mogul says that all of the references in the specification to "batt" describe a multi-layered or composite material. Lydall counters that the plain language of the claim, unlike other claims, does not call for a multi-layered batt and that claim 45 was added during the prosecution history specifically to capture a homogenous bat.

Determining the proper construction requires a careful examination of the use of the term "batt" in the patent to describe the shield. The first description of the batt used in the shield appears in the ABSTRACT: [the] "shield has a needled, flexible, fibrous batt <u>having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers</u>."

The first description of the batt in the specification states:

> in needling organic fibers from the organic fiber layer sandwiching the inorganic fiber layer, tufts of the organic fibers can protrude from opposite outer sides of the organic fiber layers so as to form a tufted surface and a tufted lower surface

[8]The patent uses the terms "bat" and "batt" interchangeably. For consistency, the Court uses "batt."

of the needled bat."

col. 4 ll 21-25.

This statement suggests that the batt consists of an organic and inorganic layer. Indeed, the specification goes on to say "[w]hen the batt of the composite organic and inorganic fibers. . ." Col. 4 ll. 55-56 (emphasis added). The specification (underlined for emphasis) goes on to further describe the batt used in the shield as follows:

> [t]he shield has a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers.
>
> col. 5 ll. 19-21.
> . . .
> [t]he shield has a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers.
>
> col. 6 ll. 53-55.

Under the Description of Preferred Embodiments, the batt is described as a composite of layers:

> the present insulation batt, generally, also has organic fiber layers which function as binding layers. An insulating layer of insulating fibers is disposed between opposite binding layers and binding fibers
>
> col. 9 ll. 21-25.
> . . .
> The insulation batt may be of various thicknesses, depending upon the degree of thermal and acoustical insulation required, the particular binding fibers of binding layers and the particular insulating fibers of insulating layer.
>
> col. 10 ll. 54-57.

The specification goes on to describe the composition of the insulating and binding fibers:

> The insulating fibers preferably will be any of the usual inorganic fibers, such as glass fibers, mineral fibers, alumina fibers and the like . . . However, were the requirement for thermal insulation is lower and the requirement for acoustical

> insulation is higher, the insulating fibers need not be inorganic fibers and may be, at least in part, organic fibers, such as polyester fibers, nylon fibers and the like. Those fibers may be solid or hollow, the latter of which provides a greater thermal insulation.
> The binding fibers are normally organic fibers, such as polyester fibers, nylon, fibers, olefine fibers, and cellulose acetate fibers.

col. 11 ll. 1-13.

The specification further describes the batt and its general formation:

> To produce the present shield, a flexible fibrous batt of an insulating layer of insulating fibers is disposed between opposite carded binding layers of binding fibers, i.e. formed by carding a binding layer, then placing an insulating layer thereover either preformed or by carding, and then carding a binding layer thereover, all in the conventional manner. Thereafter the batt is needled . . .

col. 13 ll. 19-25 (emphasis added).

As Federal-Mogul points out, there is not a hint in the specification that the batt can be a single homogeneous layer. The "batt" is consistently described as having an insulating layer sandwiched between binding layers. Tellingly, the specification says that the insulating layer is usually, but need not be, inorganic fibers and may consist, "at least in part," of some form of organic fibers. This indicates an awareness and a desire to capture a broader configuration of the batt. Even in further describing the composition of the insulating layer, there is no indication that the batt may be comprised of a single, i.e. homogenous layer.

Moreover, the reference numerals 44 and 45 appear following the word "fibers." In Figure 4 of the patent, shown below, numeral 44 refers to the insulating layer and numeral 45 refers to the binding layers. While there is authority indicating that reference numerals do not have an effect on the scope of a claim, see MPEP § 601.01(m), the reference numerals are consistent with the description of the batt in the

specification.

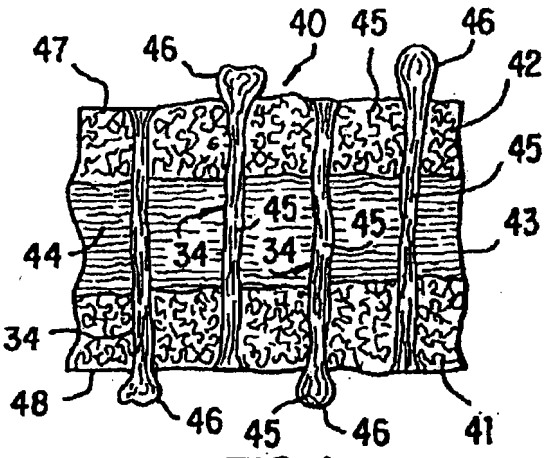

FIG.4

Lydall is correct in saying that the claim language "fibrous batt of fibers" does not, in isolation, suggest that the batt be layered. This argument, however, ignores the use of the term "batt" in the specification. Lydall is also correct in noting that the term "batt" and "fibrous batt" appears elsewhere in the specification in describing the prior art which can be read as meaning simply a single layer of material made up of fibers. However, those references are to the prior art and not the batt described in the invented shield. Thus, they do little to advance Lydall's argument.

As to the prosecution history, claim 45 was added

> to clarify that the present invention is not limited to the needled, flexible fibrous batt (40) being constructed from an insulating layer disposed between two opposite binding layers. The originally patented claim 1[9] specifies an insulating

[9]Claim 1 of the original patent clearly described a composite batt. Claim 1 of the reissue patent deleted language regarding the composition of the batt. The deleted

> layer disposed between opposite binding layers. Although it is believed that the originally patented claim 1 covers an insulating layer and opposite binding layers being made from the same material such that the needled, flexible, fibrous batt is a homogeneous batt of material, the above amendment to claim 1 is being presented to confirm that such an embodiment is within the scope of the claims of the present invention.

File history, Tab J, Combined Reissue Declaration and Power of Attorney, pp. 3-4.

The problem with Lydall's reliance on the prosecution history is that representations made by an applicant during prosecution cannot be used to enlarge the content of the specification. Biogen, Inc. v. Berlex Labs., Inc., 318 F.3d 1132, 1140 (Fed. Cir. 2003). The focus of claim construction is not on the subjective intent of the patentee but rather "on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean." Markman, 52 F.3d at 986. Hence, when the specification and prosecution history appear in conflict, any ambiguity must be resolved in favor of the specification and claims because "the specification is the basic presentation by the applicant, and the claims represent the final product of a sometimes imperfect process." Biogen, 318 F.3d at 1140. Another canon of claim construction is that in the "unusual case" when a "patent applicant ma[kes] two contradictory and irreconcilable affirmative representations of the contested limitation, ... the narrower interpretation trumps the broader interpretation." Housey

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language is noted in brackets and bold, as follows:

> a needled flexible fibrous batt [**having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers with binding fibers of each binding layer of fibers**], some of the fibers located at a bottom portion of the batt and a top portion of the batt being needledly disposed through the [**insulating layer and an opposite binding layer**] batt to provide tufts of [**binding**] fibers protruding from [the opposite binding layer] the fibrous batt so as to form a tufted upper surface and a tufted lower surface of the batt.

Pharms., Inc. v. Astrazeneca U.K. Ltd., 366 F.3d 1348, 1356 (Fed. Cir. 2004) (citing Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1581 (Fed. Cir. 1996)). The Housey rule is consistent with the Federal Circuit's holding in Biogen that an applicant's statement during prosecution cannot enlarge the content of the specification.

Thus, there appear to be competing statements in the intrinsic record as to the composition of the batt. The specification clearly describes the "batt" as a composite of insulating and binding layers, but the applicant made a statement during prosecution alluding to a broader construction, i.e. a homogenous non-layered batt. The law says that the specification and narrower interpretation must control. The "batt," as used in the invented shield, is consistently and repeatedly described in the specification as a composite of layers. It is the only embodiment of the batt, not merely one of all possible embodiments. A person of ordinary skill in the art reading the patent would understand the composite nature of the batt. Therefore, the phrase "fibrous batt of fibers" means "a composite batt having a layer of insulating fibers sandwiched between layers of binding fibers."[10]

[10]Federal-Mogul also argues that the principle of claim differentiation supports its interpretation. Federal-Mogul says that although claim 48 defines the "batt" as having binding and insulating layers, any presumption of claim differentiation is rebutted because (1) claim 45 adds more than simply defining the batt; it adds thickness dimensions of the batt, a weight ratio of the insulating layers and binding layer, and (2) the specification clearly describes the batt used in the invention as a composite. Lydall attacks Federal-Mogul's argument and the cases it relies on. In light of its determination that the specification defines the batt used in the shield, the Court need not consider an argument on claim differentiation.

5. "fibers located at a bottom portion of the batt and a top portion of the batt"

Lydall says that either no construction is required or that the following interpretation be applied:

> fibers positioned within one section and a second section of the batt where the first section and the second section are generally on opposite sides of the batt.

Federal-Mogul urges the following interpretation:

> binding fibers located at the bottom of the batt and binding fibers located at the top of the batt

Lydall's proposed construction is convoluted. Federal-Mogul's construction flows from the notion that the batt is comprised of a composite of an insulating layer sandwiched between binding layers. The fibers located at the top and bottom of the batt are the binding layers, as seen in Figure 4, supra with the reference numeral (45). Federal-Mogul seeks to make clear that the fibers referenced in this phrase are the binding fibers. This interpretation is again consistent with the specification:

> Thereafter, the batt is needled in the manner described in connection with FIG. 10 such that the binding fibers of each binding layer to provide tufts of binding fibers 45 protruding from the opposite binding layer so as to form a tufted upper surface and a tufted lower surface.

col. 13 ll. 26-32.

The Court agrees with Federal-Mogul. The fibers located at the bottom portion of the batt and the top portion of the batt are the binding fibers. Thus, the phrase "fibers located at a bottom portion of the batt and a top portion of the batt" is interpreted, with underlined text added, as follows: "binding fibers located at a bottom portion of the batt and binding fibers located at a top portion of the batt."

6. "needledly disposed though the batt"

Lydall says that either no construction is required or that the phrase be interpreted to mean "placed from one section of the batt to an opposing section of the batt by way of needle. Federal-Mogul says that the appropriate interpretation should be:

> the binding fibers at the top of the batt are intentionally moved by needle punching on the forward stroke to pass through the bottom surface of the batt and the binding fibers at the bottom of the batt are intentionally moved by needle-punching on the forward stroke to pass though the top surface of the batt.

Federal-Mogul's interpretation appears to say the same thing as Lydall's interpretation but in a unnecessarily complicated way. There is nothing in the patent which calls for such a detailed interpretation. The phase "needeldly disposed through the batt" is simple and must be given its ordinary meaning as understood by persons in the art, i.e. the needle-punching process which is depicted in Figure 10 below.

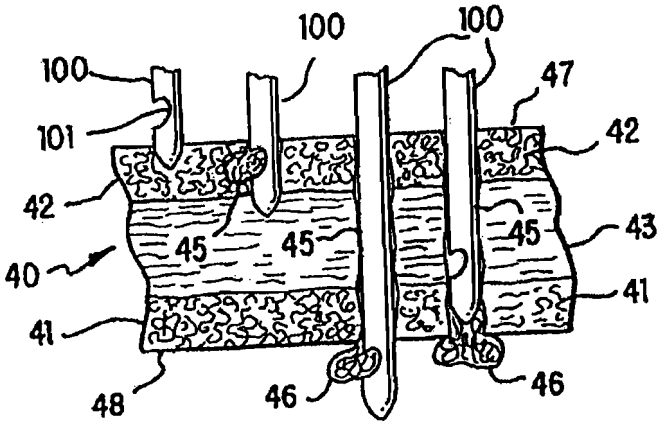

FIG. 10

Figure 10 illustrates a needle (100) disposing fibers (45) though the batt. "Dispose" is defined as "to place" and "through" is defined as "in one side and out the opposite or another side of." See Lydall Ex. D, dictionary definitions from the American Heritage Dictionary of the English Language (4th ed. 2000). As such, the Court adopts Lydall's construction. The phrase "needledly disposed through the batt" means "placed from one section of the batt to an opposite section of the batt by way of needle."

7. "tufts of fibers"

Like the construction of "batt," in the phrase "fibrous batt of fibers" this is another instance where the parties' competing interpretations are of some significance. Lydall says that "tufts" should be given an ordinary meaning, taken from a dictionary, as "clusters of fibers." Federal-Mogul says that the term "tuft" as used in the patent has a very special meaning which is captured in its proposed interpretation: "a cluster of binding fibers which have been needle-punched on the forward stroke and which extend beyond the opposite surface of the batt."

While the parties appear to agree that another word for "tuft" is "cluster," Federal-Mogul seeks to make clear that the "tufts" described in the patent are the binding fibers which have been needle-punched through the batt and extend beyond the opposite surface of the batt. Federal-Mogul again finds support in various portions of the specification, set forth below:

> According to the invention disclosed in that application, it was found that the needling technique of U.S. Pat. No. 4,522,876, described above, could be modified such that, in needling organic fibers from the organic fiber layer sandwiching the inorganic fiber layer, tufts of the organic fibers can protrude from opposite outer sides of the organic fiber layers so as to form a tufted surface and a tufted lower surface of the needled batt.

col. 4, ll.18-26.

> Binding fibers of each binder layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers protruding from that opposite binding layer.

col. 5, ll. 21-24.

> Binding fibers of each binding layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers protruding from that opposite binding layer.

col. 6, ll. 55-59.

> Binding fibers 45 of each binding layer are needledly disposed through the insulating layer 43 and an opposite binding layer 41, 42 to provide tufts 46 of binding fibers 45 protruding from the opposite binding layer so as to form a tufted upper surface 47 and a tufted lower surface 48 of insulation batt 40.

col. 9, ll. 25-30.

> As the needle 100 is withdrawn back through binding layer 41, that tuft 46 remains at the tufted lower surface 48

col. 12, ll. 62-64.

> Thereafter, the batt is needled in the manner described in connection with FIG. 10 such that the binding fibers 45 of each binding layer 41, 42 are needled through the insulating layer 43 and opposite binding layer 41, 42 to provide tufts 46 of binding fibers 45 protruding from the opposite binding layer 41, 42 so as to form a tufted upper surface 47 and a tufted lower surface 48 of batt 40.

col. 13, ll. 25-31.

> Of course, during that needling operation, as is common with barbed needles, binding fibers 45 will also be pulled with the needles to form stitches 34 of those binding fibers, as shown in FIG. 5. Thus, with the retraction of the needle 100, the tufts 46 which terminate the stitches 34 of fibers 45 remain of the surface.

col. 12, ll. 64-67, col. 13 ll. 1-2.

Lydall argues that "tufts," as that term is used in the patent, are formed on both the initial entry (first) side of the needle and exit (second) side of the needle. It states

"[w]hen the batt is needled from one side, the tufts on the opposite side will differ in appearance. The tufts on the "first" side are typically less robust and non-looped tufts, while the tufts on the opposite "second side are generally more robust than their counterparts and tend to be looped." Lydall's Claim Construction Brief at p. 20.

Lydall's argument is belied by the language in the specification and drawings, particularly FIGURE 4, supra. Notably, Lydall does not cite the patent for its position. The "tufts" referenced in the patent are the binding fibers which extend beyond the exit or second side of the needle. There is no mention or drawing of a tuft appearing on the entry or first side of the needle.

Thus, the Court agrees with Federal-Mogul that the phrase "tufts of fibers" as used in the patent must be interpreted to mean "clusters of binding fibers which have been intentionally needle-punched on a downstroke and which extend beyond an opposite surface of the batt."

8. "protruding from the fibrous batt"

Lydall again says that no interpretation is required, but offers the following proposed interpretation: "thrusting outward from the batt to the outer surface." Federal-Mogul says, building on the construction of "tufts of fibers" says that the phrase must be interpreted to mean "extending beyond the outer surface of the batt."

The key disagreement is whether "protruding from" means extending to the outer surface or extending beyond the outer surface. The Court agrees with Federal-Mogul that the invention hinges on the tufts extending beyond, not just to, the outer surface of the batt. Again, the language in the specification and the associated drawings supports this construction.

The specification states:

> In the above-noted U.S. patent application Ser. No. 09/033,852,[11] a flexible, adhesively attachable thermal and acoustical insulating shield is disclosed. According to the invention disclosed in that application, it was found that the needling technique of U.S. Pat. No. 4,522,876,[12] described above, could be modified such that, in needling organic fibers from the organic fiber layer sandwiching the inorganic fiber layer, tufts of the organic fibers can **protrude from** opposite outer sides of the organic fiber layers so as to form a tufted surface and a tufted lower surface of the needled batt.

col. 4 ll.16-26 (emphasis added).

In distinguishing over the Heirs patent, the specification states:

> it was found that the needling technique of U.S. Patent No. 4,522,876 [Heirs] described above, could be modified such that, in needling organic fibers from the organic fiber layer [binding fibers] sandwiching the inorganic layer [insulating layer] tufts of the organic fibers can **protrude from** opposite outer sides of the organic fibers layers so as to form a tufted surface and a tufted lower surface of the needled bat. An adhesive is applied to the tufted upper surface and the tufted lower surface of the batt, such that the tufts on the upper and lower surfaces are secured to those surfaces by the adhesive.

col. 4 ll. 19-31 (emphasis added).

The specification further states:

> Thus, the invention in that application [parent case] provides a flexible, adhesively attachable, thermal and acoustical insulating shield. The shield has a needled, flexible, fibrous batt having an insulating layer of insulating fibers disposed between opposite binding layers of binding fibers. Binding fibers of each binder layer are needledly disposed through the insulating layer and an opposite binding layer to provide tufts of binding fibers **protruding from** that opposite binding layer.

col. 5 ll. 17-27.

The needle then passes through the opposite binding layer 41 such that the barb

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[11]Application Serial No. 09/033, 852 issued as U.S. Patent No. 6,092,622.

[12]Prior art U.S. Patent No. 4,522,876, issued to Heirs (a co-inventor of the patents-in-suit) on June 11, 1985 (the Heirs patent).

penetrates below the tufted lower surface 48 and presents a tuft 46 beyond that tufted lower surface.

col. 12 ll. 59-62.

The specification clearly states that the tufts "protrude from." Protrude means "[t]o push or thrust outward." Lydall's suggested construction, which incorporates the definition of protrude, does not accurately describe the tufts in relation to the batt inasmuch as Lydall says that the tufts thrust only "to the outer surface" of the batt. The tufts clearly go beyond the outer surface. As Federal-Mogul points out:

> If the tufts only extended to the outer surface of the batt and did not protrude from the outer surface, then tufts would not be formed nor secured by the adhesive, and the objects and purposes of the patent would not be met. The object of the '260 Reissue patent is to increase the strength of the batt in the vertical (or "Z") direction by forming tufts on the surfaces and then securing the tufts by an adhesive.

Federal-Mogul's Sur-Reply Claim Construction Brief at p. 2-3.

Figures 3 and 4 depicts the difference between the needling technique in Heirs (Figure 3) where the stitches 34 do not protrude from the surface of the batt and the needling technique in the '260 patent (Figure 4) where the tufts 46 extend beyond the surface of the batt:

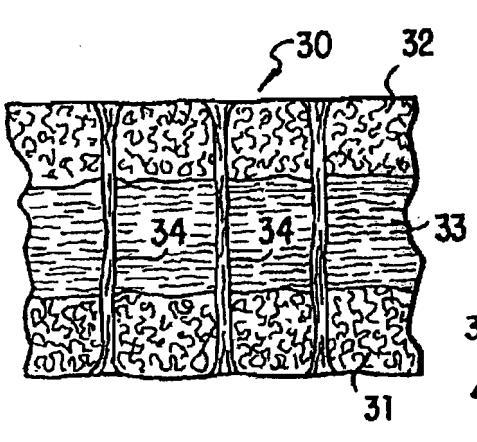

FIG. 3 PRIOR ART

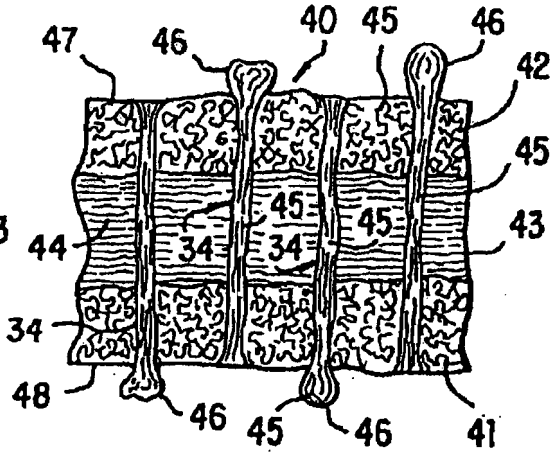

FIG. 4

Thus, “protruding from the fibrous batt” means “extending beyond the outer surface of the batt.”

9. “from a tufted upper surface and a tufted lower surface of the batt”

Lydall says that either no interpretation is required or the following interpretation should apply:

> form clusters of fibers on one outer surface and a second outer surface on opposite sides of the batt.

Federal-Mogul proposes the following interpretation:

> the upper surface of the batt has multiple tufts of needle-punched binding fibers from the bottom of the batt which extend beyond the upper surface of the batt and the bottom surface of the batt has multiple tufts of needle-punched binding fibers from the top of the batt which extend beyond the bottom surface of the batt.

Lydall appears to again be advocating for a construction where the tufts extend to, not beyond, the surface of the batt. However, Federal-Mogul’s proposed construction is too complicated. The “tufted upper surface” is simply the upper side of the batt from which the tufts protrude. The “tufted lower surface” is the lower (or opposite) side of the batt from which tufts also protrude. Given the Court’s interpretation of “tufts” as “a cluster of binding fibers which have needle-punched on the forward stroke and which extend beyond the opposite surface of the batt,” there is no need to further define “tufted upper surface” or “tufted lower surface.”

Thus, “tufted upper surface” is defined as “the upper side of the batt from which the tufts protrude.” The “tufted lower surface” is defined as “the lower (or opposite) side of the batt from which tufts protrude.”

10. "tufted upper surface"

The Court has defined this phrase above.

11. "tufts on the upper surface are secured to that surface by the adhesive"

Lydall says that the phrase should be interpreted as follows:

> clusters of fibers on one outer surface are fastened to that surface by an adhesive.

Federal-Mogul urges the following interpretation:

> the tufts of binding fibers from the bottom of the batt which extend beyond the upper surface of the batt are adhered by adhesive to the upper surface of the batt.

No interpretation is necessary. The Court has already defined "tufts" and found that the tufts extend beyond the surfaces, both upper and lower, of the batt. There is nothing ambiguous in this phrase.

12. "permanently adhered"

The parties agree that "permanently adhered" means "attached without expectation of change." The Court adopts this interpretation.

13. "tufted upper surface"

The Court has defined this phrase above.

B. Other

The Court has been guided primarily by the specification. This is one of those cases where the specification is of such detail that it describes the invention. Lydall's argument that Federal-Mogul's interpretation add process limitations is not well-taken. Claim 45 is a product claim. However, it requires by its terms (particularly as described

in the specification) that certain features are located at certain positions and are positioned as such by needling.

V. Conclusion

> Patent claim interpretation ("construction") is the process or result of determining the meaning of patent claims. This is not only central but often outcome-determinative to many patent disputes.

Edward D. Manzo, Introduction to Claim Construction in the Federal Circuit at xi. (Edward D. Manzo, ed., Thomson/West 2008). In this Markman process, the Court has determined the metes and bounds of a claim 45 so that the disputed words, properly interpreted, has captured the invention of the patent and has given notice to the world as to what it covers. Both parties have their eye on the accused device; future proceedings will determine whether Federal-Mogul will avoid being captured by Lydall.

SO ORDERED.

s/Avern Cohn
AVERN COHN
UNITED STATES DISTRICT JUDGE

Dated: July 3, 2008

I hereby certify that a copy of the foregoing document was mailed to the attorneys of record on this date, July 3, 2008, by electronic and/or ordinary mail.

s/Julie Owens
Case Manager, (313) 234-5160